IN THE UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF DELAWARE

BIO-RAD LABORATORIES, INC.	:	
and	:	
THE UNIVERSITY OF CHICAGO	:	
Plaintiffs,	:	Civ. A. No. 1:15-cv-00152-RGA
v.	:	**REDACTED – PUBLIC VERSION**
10X GENOMICS, INC.	:	
Defendant	:	

JOINT [PROPOSED] PRETRIAL ORDER

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TABLE OF CONTENTS

Pursuant to Federal Rule of Civil Procedure 16, D. Del. Local Rule 16.3, and the April 21, 2017 Scheduling Order (D.I. 165) in this matter, plaintiffs Bio-Rad Laboratories, Inc. ("Bio-Rad") and The University of Chicago ("Chicago," and collectively with Bio-Rad, "Plaintiffs"), and defendant 10X Genomics, Inc. ("10X Genomics") submit this Joint [Proposed] Pretrial Order. The Pretrial Conference was scheduled for Friday, March 30, 2018 at 9:00 a.m., but has since been cancelled (*see* D.I. 315) and will be reset for a date to be determined, and a five-day jury trial is scheduled to begin on Monday, April 16, 2018 at 9:30 a.m.

The Parties have stipulated to the following matters as to the conduct of trial and the Court hereby orders:

I. NATURE AND ACTION OF THE PROCEEDINGS

1. This is a patent infringement action in which Plaintiffs assert that 10X Genomics has infringed and continues to infringe U.S. Patent Nos. 7,129,091 (the "'091 Patent"), 8,304,193 (the "'193 Patent"), 8,329,407 (the "'407 Patent"), 8,882,148 (the "'148 Patent"), and 8,889,083 (the "'083 Patent") (collectively, the "Asserted Patents"). Plaintiffs allege that 10X Genomics infringes the '091 Patent's claims 1, 3, 5, 31, 37, 38, and 39; the '193 Patent's claims 1, 6, and 8; the '407 Patent's claims 1, 3, 10, and 11; the '148 Patent's claims 1, 6, and 8; and the '083 Patent's claims 1, 2, 9, 10, 20, 22, and 26. 10X Genomics asserts that it does not infringe any of the asserted claims of the Asserted Patents and that the asserted claims are invalid. 10X Genomics further disputes the amount of damages that Plaintiffs seek.

2. 10X Genomics further seeks declaratory relief on two grounds: (i) non-infringement of any claim of the Asserted Patents and (ii) that one or more claims of the Asserted Patents are invalid. Plaintiffs deny that 10X Genomics is entitled to declarations of non-infringement and invalidity.

3. The operative pleadings are Plaintiffs' Third Amended Complaint (D.I. 85), 10X Genomics's Answer and Counterclaims to Plaintiffs' Third Amended Complaint (D.I. 87), and Plaintiffs' Answer to 10X Genomics's Second Amended Counterclaims (D.I. 88). Plaintiffs' Complaint has counts for: (i) infringement of the '091 Patent; (ii) infringement of the '193 Patent; (iii) infringement of the '407 Patent; (iv) infringement of the '148 Patent; and (v) infringement of the '083 Patent.[1] 10X Genomics's Counterclaim has counts for: (i) declaratory judgment of non-infringement of the '091 Patent; (ii) declaratory judgment of invalidity of the '091 Patent; (iii) declaratory judgment of non-infringement of the '193 Patent; (iv) declaratory judgment of invalidity of the '193 Patent; (v) declaratory judgment of non-infringement of the '407 Patent; (vi) declaratory judgment of invalidity of the '407 Patent; (vii) declaratory judgment of non-infringement of the '148 Patent; (viii) declaratory judgment of invalidity of the '148 Patent; (ix) declaratory judgment of non-infringement of the '083 Patent; and (x) declaratory judgment of invalidity of the '083 Patent.[2]

4. The Parties filed a joint claim construction brief on December 5, 2016. *See* D.I. 93. The Court held *Markman* hearings on December 16, 2016 and March 6, 2017. *See* Case Docket Minute Entries, dated Dec. 16, 2016 and Mar. 6, 2017. The Court issued two Claim Construction Orders on February 3, 2017 and May 30, 2017. *See* D.I. 121; D.I. 179. To the extent Plaintiffs' or 10X Genomics's proposed constructions were not adopted, all parties object to the claim constructions and preserve their rights on those issues for appeal.

[1] Plaintiffs' complaint count alleging infringement of U.S. Patent No. 8,658,430 (the "'430 Patent") has since been dismissed and is no longer at issue in the case. *See* D.I. 138.

[2] 10X Genomics's counterclaims for non-infringement and invalidity of the '430 Patent have also been dismissed from this case and are no longer at issue. *See id.*

5. The following motions are pending: Plaintiffs' Motion for Summary Judgment (D.I. 235); Plaintiffs' Motion to Exclude Expert Testimony of Dr. Wilhelm Huck and Dr. John Quackenbush (D.I. 239); Plaintiffs' Motion to Exclude Expert Testimony of Dr. Ryan Sullivan (D.I. 244); 10X Genomics's Motion for Summary Judgment (D.I. 242); and 10X Genomics's Motion to Exclude the Reasonable Royalty and Lost Profits Opinions of James Malackowski (D.I. 249).

II. FEDERAL JURISDICTION

6. This is a civil action arising under the Patent Laws of the United States, 35 U.S.C. § 1 *et seq*. This Court has subject matter jurisdiction over this action pursuant to 28 U.S.C. §§ 1331, 1338(a), 2201, and 2202. Venue is proper in the District of Delaware pursuant to 28 U.S.C. §§ 1391 and 1400(b).

III. FACTS THAT ARE ADMITTED AND REQUIRE NO PROOF

7. Bio-Rad Laboratories, Inc. is a corporation organized under the laws of the State of Delaware with its principal place of business in Hercules, California.

8. The University of Chicago is an Illinois institution with its principal place of business in Chicago, Illinois.

9. 10X Genomics, Inc. is a corporation organized under the laws of the State of Delaware with its principal place of business in Pleasanton, California.

10. The '091 Patent is titled "Device And Method For Pressure-Driven Plug Transport And Reaction."

11. The inventors listed on the face of the '091 Patent are Rustem F. Ismagilov, Joshua David Tice, and Helen Song.

12. The assignee listed on the face of the '091 Patent is The University of Chicago.

13. The patent application for the ’091 Patent was filed on May 9, 2003. The ’091 Patent claims priority to a provisional patent application filed on May 9, 2002.

14. The ’091 Patent issued on October 31, 2006.

15. The ’193 Patent is titled “Method For Conducing An Autocatalytic Reaction In Plugs In A Microfluidic System.”

16. The inventors listed on the face of the ’193 Patent are Rustem F. Ismagilov, Joshua David Tice, Cory John Gerdts, and Bo Zheng.

17. The assignee listed on the face of the ’193 Patent is The University of Chicago.

18. The patent application for the ’193 Patent was filed on February 9, 2011. The ’193 Patent claims priority to a provisional patent application filed on May 9, 2002.

19. The ’193 Patent issued on November 6, 2012.

20. The ’407 Patent is titled “Method For Conducting Reactions Involving Biological Molecules In Plugs In A Microfluidic System.”

21. The inventors listed on the face of the ’407 Patent are Rustem F. Ismagilov, Joshua David Tice, Cory John Gerdts, and Bo Zheng.

22. The assignee listed on the face of the ’407 Patent is The University of Chicago.

23. The patent application for the ’407 Patent was filed on February 9, 2011. The ’407 Patent claims priority to a provisional patent application filed on May 9, 2002.

24. The ’407 Patent issued on December 11, 2012.

25. The ’148 Patent is titled “Method Of Performing PCR Reaction In Continuously Flowing Microfluidic Plugs.”

26. The inventors listed on the face of the ’148 Patent are Rustem F. Ismagilov, Joshua David Tice, Cory John Gerdts, and Bo Zheng.

27. The assignee listed on the face of the ’148 Patent is The University of Chicago.

28. The patent application for the ’148 Patent was filed on July 31, 2012. The ’148 Patent claims priority to a provisional patent application filed on May 9, 2002.

29. The ’148 Patent issued on September 2, 2014.

30. The ’083 Patent is titled “Device And Method For Pressure-Driven Plug Transport And Reaction.”

31. The inventors listed on the face of the ’083 Patent are Rustem F. Ismagilov, Joshua David Tice, Helen Song, and Lewis Spencer Roach, Jr.

32. The assignee listed on the face of the ’083 Patent is The University of Chicago.

33. The patent application for the ’083 Patent was filed on October 30, 2006. The ’083 Patent claims priority to a provisional patent application filed on May 9, 2002.

34. The ’083 Patent issued on November 18, 2014.

35. Bio-Rad Laboratories, Inc. is an exclusive licensee of the ’091 Patent, ’193 Patent, ’407 Patent, ’148 Patent, and ’083 Patent.

36. 10X Genomics, Inc. does not have a license to the ’091 Patent, ’193 Patent, ’407 Patent, ’148 Patent, or ’083 Patent.

37. 10X Genomics, Inc. has manufactured, used, offered to sell, and/or sold its GemCode™ Instrument within the United States.

38. 10X Genomics, Inc. has manufactured, used, offered to sell, and/or sold its GemCode™ Single Cell Instrument within the United States.

39. 10X Genomics, Inc. manufactures, uses, offers to sell, and/or sells its Chromium™ Controller within the United States.

40. 10X Genomics, Inc. manufactures, uses, offers to sell, and/or sells its Chromium™ Single Cell Controller within the United States.

41. Quake, S., et al., "Microfabricated Crossflow Devices and Methods," International Publication No. WO 02/23163 A1 ("*Quake PCT*") was published on March 21, 2002.

42. Quake, S., et al., "Microfabricated Crossflow Devices and Methods," U.S. Patent Application Publication 2002/0058332 A1 ("*Quake*") was published on May 16, 2002, from Application No. 09/953,103, which was filed on September 14, 2001, and claims priority to provisional application No. 60/246,793, filed on November 8, 2000, and provisional application No. 60/233,037, filed on September 15, 2000.

43. Shaw Stewart, P., "Combining chemical reagents," UK Patent Application Publication GB 2,097,692 A ("*Shaw Stewart*") was published on November 10, 1982 from application No. 8,200,642.

44. Corbett, J., et al., "Device and Method for the Automated Cycling of Solutions Between Two or More Temperatures," U.S. Patent No. 5,270,183 ("*Corbett*") issued on December 14, 1993.

45. Lagally, E.T., et al., "Single-Molecule DNA Amplification and Analysis in an Integrated Microfluidic Device," *Analytical Chemistry*, 73(3): 565-570 (2001) ("*Lagally*") was published on February 1, 2001.

46. Schubert, K.V. and Kaler, E.W., "Microemulsifying fluorinated oils with mixtures of fluorinated and hydrogenated surfactants," *Colloids and Surfaces A: Physiochemical and Engineering Aspects*, 84: 97-106 (1994) ("*Schubert*") was published on April 18, 1994.

47. Krafft, M.P., et al., "Multiple Emulsions Comprising a Hydrophobic Continuous Phase," U.S. Patent No. 5,980,936 ("*Krafft*") issued on November 9, 1999.

48. Erbacher, C., et al., "Towards Integrated Continuous-Flow Chemical Reactors," *Mikrochim. Acta*, 131: 19-24 (1999) ("*Erbacher*") was published on January 1, 1999.

49. Anderson, B., et al., "Chemical Amplification Based on Fluid Partitioning," U.S. Patent No. 7,041,481 B2 ("*Anderson*") issued on May 9, 2006 from application No. 10/389,130, filed on March 14, 2003.

IV. FACTS THAT REMAIN TO BE LITIGATED

A. Plaintiffs Bio-Rad and Chicago

50. Plaintiffs present the following statements of issues of fact that remain to be litigated. This statement is based on the current status of the case and the Court's rulings to date. Plaintiffs reserve the right to modify or supplement this statement in response to subsequent Court rulings and/or 10X Genomics's attempts to introduce different or additional facts. The following statement of issues of fact are not exhaustive, and Plaintiffs reserve the right to prove any matters identified in the pleadings, interrogatory responses, and/or expert reports. Plaintiffs intend to offer evidence as to the issues of fact and issues of law identified in this Joint [Proposed] Pretrial Order. Plaintiffs further intend to offer evidence to rebut evidence offered by 10X Genomics. Should the Court determine that any issue identified here is more appropriately considered an issue of law, Plaintiffs incorporate such issues by reference into its Statement of Issues Of Law That Remain To Be Litigated (*infra*). To the extent that Plaintiffs' Statement of Issues Of Law That Remain To Be Litigated contain issues that the Court deems to be issues of fact, those issues are incorporated herein by reference. Plaintiffs do not assume the burden of proof with regard to any of the below-listed issues of fact. Plaintiffs reserve their right to revise this statement.

51. Whether 10X Genomics's GemCode™ Instrument infringes the '091 Patent, '193 Patent, '407 Patent, '148 Patent, and/or '083 Patent literally, indirectly, or under the doctrine of equivalents.

52. Whether 10X Genomics's GemCode™ Single Cell Instrument infringes the '091 Patent, '193 Patent, '407 Patent, '148 Patent, and/or '083 Patent literally, indirectly, or under the doctrine of equivalents.

53. Whether 10X Genomics's Chromium™ Controller infringes the '091 Patent, '193 Patent, '407 Patent, '148 Patent, and/or '083 Patent literally, indirectly, or under the doctrine of equivalents.

54. Whether 10X Genomics's Chromium™ Single Cell Controller infringes the '091 Patent, '193 Patent, '407 Patent, '148 Patent, and/or '083 Patent literally, indirectly, or under the doctrine of equivalents.

55. Whether 10X Genomics's consumable products, including the (i) GemCode™ Long-Read, (ii) GemCode™ Single Cell, (iii) Chromium™ Genome/Exome, (iv) Chromium™ Single Cell 3', and/or (v) Chromium™ Single Cell V(D)J, infringe the '091 Patent, '193 Patent, '407 Patent, '148 Patent, and/or '083 Patent literally, indirectly, or under the doctrine of equivalents.

56. Whether, if found to infringe, 10X Genomics's infringement of the '091 Patent, '193 Patent, '407 Patent, '148 Patent, and/or '083 Patent has been and/or continues to be willful.

57. Whether the asserted claims of the '407 Patent are anticipated in view of the prior art.

58. Whether the asserted claims of the '091 Patent, '193 Patent, '407 Patent, and/or '148 Patent are obvious in view of the prior art.[3]

59. The level of ordinary skill in the fields to which the '091 Patent, '193 Patent, '407 Patent, '148 Patent, and/or '083 Patent pertain.

60. The scope and content of the prior art to the '091 Patent, '193 Patent, '407 Patent, and/or '148 Patent.

61. The differences, if any, between the prior art and the asserted claims of the '091 Patent, '193 Patent, '407 Patent, and/or '148 Patent.

62. Whether "secondary considerations" Plaintiffs allege are present and have a nexus to the asserted claims of the '091 Patent, '193 Patent, '407 Patent, and/or '148 Patent.

63. Whether the asserted claims of the '091 Patent, '193 Patent, '407 Patent, '148 Patent, and/or '083 Patent are invalid for failure to satisfy the written description and/or enablement requirements under 35 U.S.C. § 112.

64. Whether Plaintiffs are entitled to lost profits and/or a reasonable royalty from 10X Genomics if it is found liable for any of Plaintiffs' claims.

65. The amount of any damages 10X Genomics owes Plaintiffs if 10X Genomics is found liable for any of Plaintiffs' claims.

66. Whether Plaintiffs are entitled to a permanent junction enjoining 10X Genomics and its officers, directors, employees, agents, servants, affiliated entities, and/or all persons in active concert or participation with it from continued infringement of the '091 Patent,

[3] The Court has previously ruled that 10X Genomics is estopped from asserting invalidity based on obviousness against the '083 Patent. *See* D.I. 224 at 29:11-14 ("But in terms of what's the legal rule that I'm going to adopt, I'm going to go with what it turns out . . . what seems to be the majority view of the District Courts.").

'193 Patent, '407 Patent, '148 Patent, and/or '083 Patent if it is found liable for any of Plaintiffs' claims.

67. Whether Plaintiffs are entitled to enhanced damages and attorneys' fees and costs.

B. Defendant 10X Genomics

68. 10X Genomics presents the following statements of issues of fact that remain to be litigated. This statement is based on the current status of the case and the Court's rulings to date. 10X Genomics reserves the right to modify or supplement this statement in response to subsequent Court rulings and/or Plaintiffs' attempts to introduce different or additional facts. The following statement of issues of fact is not exhaustive, and 10X Genomics reserves the right to prove any matters identified in the pleadings, interrogatory responses, and/or expert reports. 10X Genomics intends to offer evidence as to the issues of fact and issues of law identified in this Joint [Proposed] Pretrial Order. 10X Genomics further intends to offer evidence to rebut evidence offered by Plaintiffs. Should the Court determine that any issue identified here is more appropriately considered an issue of law, 10X Genomics incorporates such issues by reference into its Statement of Issues Of Law That Remain To Be Litigated (*infra*). To the extent that 10X Genomics's Statement of Issues Of Law That Remain To Be Litigated contains issues that the Court deems to be issues of fact, those issues are incorporated herein by reference. 10X Genomics does not assume the burden of proof with regard to any of the below-listed issues of fact. 10X Genomics reserves its right to revise this statement.

69. Whether 10X Genomics's (i) GemCode Long-Read, (ii) GemCode Single Cell, (iii) Chromium Genome/Exome, (iv) Chromium Single Cell 3', and/or (v) Chromium Single Cell V(D)J, or the use thereof infringe the '091 Patent, '193 Patent, '407 Patent, '148 Patent, and/or '083 Patent literally, indirectly, or under the doctrine of equivalents.

70. Whether, if found to infringe, 10X Genomics's infringement of the '091 Patent, '193 Patent, '407 Patent, '148 Patent, and/or '083 Patent has been and/or continues to be willful.

71. The priority dates of the asserted claims of the '091 Patent, '193 Patent, '407 Patent, '148 Patent, and/or '083 Patent.

72. Whether the asserted claims of the '407 Patent are anticipated in view of the prior art.

73. Whether the asserted claims of the '091 Patent, '193 Patent, '407 Patent, '148 Patent, and/or '083 Patent are obvious in view of the prior art.

74. The level of ordinary skill in the fields to which the '091 Patent, '193 Patent, '407 Patent, '148 Patent, and/or '083 Patent pertain.

75. The scope and content of the prior art to the '091 Patent, '193 Patent, '407 Patent, '148 Patent, and/or '083 Patent.

76. The differences, if any, between the prior art and the asserted claims of the '091 Patent, '193 Patent, '407 Patent, '148 Patent, and/or '083 Patent.

77. Whether "secondary considerations" Plaintiffs allege are present and have a nexus to the asserted claims of the '091 Patent, '193 Patent, '407 Patent, '148 Patent, and/or '083 Patent.

78. Whether the asserted claims of the '091 Patent, '193 Patent, '407 Patent, '148 Patent, and/or '083 Patent are invalid for lack of written description, lack of enablement, and/or indefiniteness under 35 U.S.C. § 112.

79. Whether Plaintiffs are entitled to lost profits and/or a reasonable royalty from 10X Genomics if it is found liable for any of Plaintiffs' claims.

80. The amount of any damages 10X Genomics owes Plaintiffs if 10X Genomics is found liable for any of Plaintiffs' claims.

81. Whether Plaintiffs are entitled to a permanent injunction enjoining 10X Genomics and its officers, directors, employees, agents, servants, affiliated entities, and/or all persons in active concert or participation with it from continued infringement of the '091 Patent, '193 Patent, '407 Patent, '148 Patent, and/or '083 Patent if it is found liable for any of Plaintiffs' claims.

82. Whether Plaintiffs are entitled to attorneys' fees and costs.

83. Whether 10X Genomics is entitled to attorneys' fees and costs.

V. ISSUES OF LAW THAT REMAIN TO BE LITIGATED

A. Plaintiffs Bio-Rad and Chicago

84. Plaintiffs identify the following issues of law that remain to be litigated, with a citation to authorities relied upon. This statement is based on the arguments they expect to make as well as their understanding of the arguments 10X Genomics is likely to make. If 10X Genomics seeks to introduce different legal arguments, Plaintiffs reserve the right to supplement this statement. This statement is based on the current status of the case and the Court's rulings to date. Plaintiffs reserve the right to modify or supplement this statement in response to subsequent Court rulings and/or 10X Genomics's attempts to introduce different or additional legal arguments. If an issue identified herein is more properly considered an issue of fact, it should be so considered. If any issues of fact are more properly considered issues of the law, those statements are incorporated into this statement. The authority cited herein is not exhaustive; Plaintiffs may rely on authority not cited in this statement.

Plaintiffs object to 10X Genomics presenting any non-infringement, invalidity, affirmative defense, arguments, or opinions that it has not properly preserved in its Answer and

Counterclaims to Plaintiffs' Third Amended Complaint (D.I. 87), discovery responses, or its expert reports and/or any non-infringement, invalidity, affirmative defenses, arguments or opinions previously precluded by the Court. These include but are not limited to (i) an obviousness defense on the '083 Patent, (ii) an indefiniteness defense on the '193 Patent, and (iii) an affirmative defense based on a bar to damages and failure to provide notice. Plaintiffs reserve the right to raise with the Court other defenses, arguments or opinions that 10X Genomics has not properly preserved and thus waived.

1. **Willfulness and Enhanced Damages**

85. Whether Plaintiffs have proven by a preponderance of the evidence that 10X Genomics's infringement of the '091 Patent, '193 Patent, '407 Patent, '148 Patent, and/or '083 Patent has been and/or continues to be willful. *See* 35 U.S.C. § 284. Willfulness infringement is an issue of fact for the jury. *WBIP, LLC v. Kohler Co.*, 829 F.3d 1317, 1341 (Fed. Cir. 2016). Knowledge of the asserted patent is a prerequisite to willfulness. *Id*. Conduct that is "willful, wanton, malicious, bad faith, deliberate, consciously wrongful, or flagrant" may justify the award of enhanced damages. *Halo Elecs., Inc. v. Pulse Elecs., Inc.*, 136 S. Ct. 1923, 1932 (2016). "The subjective willfulness of a patent infringer, intentional or knowing, may warrant enhanced damages, without regard to whether his infringement was objectively reckless." *Id.* at 1933. An example of subjective willfulness is a defendant who acted "despite a risk of infringement that was 'either known or so obvious that it should have been known to the accused infringer . . . .'" *WesternGeco L.L.C. v. ION Geophysical Corp.*, 837 F.3d 1358, 1362 (Fed. Cir. 2016) (citation omitted).

2. **Injunctive Relief**

86. Whether Plaintiffs are entitled to permanent injunctive relief prohibiting 10X Genomics from further infringement of the '091 Patent, '193 Patent, '407 Patent, '148 Patent,

and/or ’083 Patent. *See* 35 U.S.C. § 283. As part of the relief from adjudicated infringement, a court upon the request of the patent holder may permanently enjoin the infringer, during the life of the patent, from continuing with the activity found to have infringed the patent. *See eBay Inc. v. MercExchange, L.L.C.*, 547 U.S. 388 (2006). To grant a permanent injunction, a patent holder must demonstrate: (1) that it has suffered an irreparable injury; (2) that remedies available at law, such as monetary damages, are inadequate to compensate for that injury; (3) that, considering the balance of hardships between the patentee and infringer, a remedy in equity is warranted; and (4) the public interest would not be disserved by a permanent injunction. *Id.*

3. **Anticipation**

87. Whether any claim of the ’407 Patent is anticipated in view of the prior art. *See* 35 U.S.C. § 102. A patent claim is invalid as anticipated under Section 102(a) if “the claimed invention was patented, described in a printed publication, or in public use, on sale, or otherwise available to the public before the effective filing date of the claimed invention.” *Id.* at § 102(a). A patent claim is invalid as anticipated under Section 102(b) if “the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.” *Id.* at § 102(b). A prior art reference anticipates a claim “if it discloses all of the claimed limitations “‘arranged or combined in the same way as in the claim.’” *Wm. Wrigley Jr. Co. v. Cadbury Adams USA LLC,* 683 F.3d 1356, 1361 (Fed. Cir. 2012) (quoting *Net MoneyIN, Inc. v. VeriSign, Inc.*, 545 F.3d 1359, 1370 (Fed. Cir. 2008)). There “must be no difference between the claimed invention and the reference disclosure, as viewed by a person of ordinary skill in the field of the invention.” *Scripps Clinic & Res. Found. v. Genentech, Inc.*, 927 F.2d 1565, 1576 (Fed. Cir. 1991), *clarified on denial of reconsideration by* 1991 WL 523489 (Fed. Cir. Apr. 30, 1991).

88. In addition to showing that a prior art reference meets all the limitations of a patent claim (identity requirement), to constitute an anticipation the reference must include a description that enables a person of ordinary skill to make the claimed invention without undue experimentation, *i.e.*, the reference must enable that which it is asserted to anticipate. *See, e.g.*, *Elan Pharms., Inc. v. Mayo Found. for Med. Educ. and Res.*, 346 F.3d 1051 (Fed. Cir. 2003); *Minnesota Min. & Mfg. Co. v. Chemque, Inc.*, 303 F.3d 1294 (Fed. Cir. 2002); *Bristol-Myers Squibb Co. v. Ben Venue Labs., Inc.*, 246 F.3d 1368, 1374 (Fed. Cir. 2001) ("To anticipate, the reference must also enable one of skill in the art to make and use the claimed invention."). The disclosure in the reference must be adequate to enable possession of the desired subject matter. *Elan Pharms.*, 346 F.3d at 1055.

89. Enablement is a question of fact and is determined as of the date of the allegedly anticipating reference. *See, e.g.*, *Elan Pharms,* 346 F.3d at 1054; *In re Omeprazole Patent Litig.*, 490 F. Supp. 2d 381 (S.D.N.Y. 2007) ("An invention is placed in the possession of the public only where 1) the reference meets the identity requirement such that 2) the person of ordinary skill in the art would have been able to make it *as of that* time based on his knowledge and the teaching of the publication."). The standard for undue experimentation is set out in *In re Wands*, 858 F.2d 731 (Fed. Cir. 1988). The court sets out eight factors for determining whether a disclosure requires undue experimentation: (1) the quantity of experimentation necessary; (2) the amount of direction or guidance presented; (3) the presence or absence of working examples; (4) the nature of the invention; (5) the state of the prior art; (6) the relative skill of those in the art; (7) the predictability or unpredictability of the art, and (8) the breadth of the claims. *In re Wands*, 858 F.2d at 737.

90. Anticipation requires that the reference must disclose the invention "without *any* need for picking, choosing, and combining various disclosures not directly related to each other by the teachings of the cited reference." *In re Arkley*, 455 F.2d 586, 587-88 (C.C.P.A 1972) ("Such picking and choosing may be entirely proper in the making of a 103, obviousness rejection, where the applicant must be afforded an opportunity to rebut with objective evidence any inference of obviousness which may arise from the *similarity* of the subject matter which he claims to the prior art, but it has no place in the making of a 102, anticipation rejection.").

4. **Obviousness**

91. Whether any claim of the '091 Patent, '193 Patent, '407 Patent, '148 Patent, and/or '083 Patent is obvious in view of the prior art. *See* 35 U.S.C. § 103; *KSR Int'l Co. v. Teleflex Inc.*, 550 U.S. 398, 405 and 421 (2007). A patent is invalid as obvious under § 103 "if the differences between the claimed invention and the prior art are such that the claimed invention as a whole would have been obvious before the effective filing date of the claimed invention to a person having ordinary skill in the art to which the claimed invention pertains." 35 U.S.C. § 103; *Wyers v. MasterLock Co.*, 616 F.3d 1231, 1237 (Fed. Cir. 2010).

92. Patentability shall not be negated by the manner in which the invention was made. 35 U.S.C. § 103. "[A] patent composed of several elements is not proved obvious merely by demonstrating that each element was, independently, known in the prior art." *KSR*, 550 U.S. at 418. Rather, there must be some evidence of a reason to combine the references. *Id.* at 415, 419. Most if not all inventions arise from a combination of old elements, and every element of a claimed invention may often be found in the prior art. *In re Kotzab*, 217 F.3d 1365, 1370 (Fed. Cir. 2000).

93. Title 35 U.S.C. § 103 specifically requires consideration of the claimed invention "as a whole." The "as a whole" instruction in Title 35 prevents evaluation of the invention part

by part. Without "as a whole" requirement, an obviousness assessment might break an invention into its component parts (A + B + C), then find a prior art reference containing A, another containing B, and another containing C, and on that basis alone declare the invention obvious. *See Cheese Sys., Inc. v. Tetra Pak Cheese & Powder Sys., Inc.*, 725 F.3d 1341, 1352 (Fed. Cir. 2013) ("Obviousness cannot be based on the hindsight combination of components selectively culled from the prior art to fit the parameters of the patented invention."); *In re NTP, Inc.*, 654 F.3d 1279, 1299 (Fed. Cir. 2011) ("Care must be taken to avoid hindsight reconstruction by using 'the patent in suit as a guide through the maze of prior art references, combining the right references in the right way so as to achieve the result of the claims in suit.'"). This form of hindsight reasoning, using the invention as a roadmap to find its prior art components, would discount the value of combining various existing features or principles in a new way to achieve a new result – often the very definition of invention. *Ruiz v. A.B. Chance Co.*, 357 F.3d 1270, 1275 (Fed. Cir. 2004).

94. "A party seeking to invalidate a patent on the basis of obviousness must demonstrate by clear and convincing evidence that a skilled artisan would have been motivated to combine the teachings of the prior art references to achieve the claimed invention, and that the skilled artisan would have had a reasonable expectation of success in doing so." *Kinetic Concepts, Inc. v. Smith & Nephew, Inc.*, 688 F.3d 1342, 1360 (Fed. Cir. 2012). Teachings, suggestions and motivations may be found in written references including the prior art itself, the knowledge of a person of ordinary skill in the art including inferences and ordinary creativity that a person of ordinary skill would naturally employ, the nature of the problem to be solved by the claimed invention, or any need or problem known in the field of the invention at the time of and addressed by the invention. However, the mere recitation of the words "common sense"

without any support is improper. *Mintz v. Dietz & Watson*, 679 F.3d 1372, 1377 (Fed. Cir. 2012) ("The mere recitation of the words 'common sense' without any support adds nothing to the obviousness equation.").

95. The patent holder "may rebut a prima facie showing of obviousness with objective indicia of nonobviousness." *Ormco Corp. v. Align Tech., Inc.*, 463 F.3d 1299, 1311 (Fed. Cir. 2006); *Transocean Offshore Deepwater Drilling, Inc. v. Maersk Contractors USA, Inc.*, 617 F.3d 1296, 1305 (Fed. Cir. 2010) ("If all of the factual disputes regarding the objective evidence resolve in favor of [plaintiff], it has presented a strong basis for rebutting the prima facie case [of obviousness]."). "Secondary considerations" (sometimes referred to as objective indicia of non-obviousness) constitute "independent evidence of nonobviousness." *Mintz*, 679 F.3d at 1378. The objective indicia of non-obviousness should be considered to guard against hindsight bias. Such factors include: (i) copying; (ii) long felt but unresolved need; (iii) failure of others to develop the invention; (iv) licenses showing industry respect for the invention; (v) commercial success; (vi) unexpected results created by the claimed invention; (vii) whether the claimed invention was praised by others in the field; and skepticism of skilled artisans before the invention. *Power Integrations, Inc. v. Fairchild Semiconductor Int'l, Inc.*, 711 F.3d 1348, 1368 (Fed. Cir. 2013); *Cross Med. Prods., Inc. v. Medtronic Sofamor Danek, Inc.*, 424 F.3d 1293, 1322-23 (Fed. Cir. 2005); *Ormco*, 463 F.3d at 1311. This list is not exhaustive, however, and may also include additional factors related to obviousness or non-obviousness. *Graham v. John Deere Co.*, 383 U.S. 1, 17-18 (1966). "Objective indicia of nonobviousness must be considered in every case where present." *Apple Inc. v. Samsung Elecs. Co.*, No. 2015-1171, --- F.3d ----, 2016 WL 5864573, at *8 (Fed. Cir. Oct. 7, 2016) (*citing Transocean Offshore Deepwater Drilling, Inc. v. Maersk Drilling USA, Inc.*, 699 F.3d 1340, 1349 (Fed. Cir. 2012)). Objective

indicia "may often be the most probative and cogent evidence of nonobviousness in the record." *Id.* Such evidence "may often establish that an invention appearing to have been obvious in light of the prior art was not." *Id.* These objective guideposts are powerful tools for courts faced with the difficult task of avoiding subconscious reliance on hindsight. *Id.* The objective indicia "guard against slipping into use of hindsight and to resist the temptation to read into the prior art the teachings of the invention in issue." *Id.* (citing *Graham,* 383 U.S. at 1). The Federal Circuit requires consideration of the objective indicia because they "provide objective evidence of how the patented device is viewed in the marketplace, by those directly interested in the product." *Demaco Corp. v. F. Von Langsdorff Licensing Ltd.*, 851 F.2d 1387, 1391 (Fed. Cir. 1988).

5. **Written Description**

96. A patent claim is invalid if the patent does not contain an adequate written description of the claimed invention. *See* 35 U.S.C. § 112. "A determination that a patent is invalid for failure to meet the written description requirement of 35 U.S.C. § 112, ¶ 1 is a question of fact[.]" *Ariad Pharms., Inc. v. Eli Lilly & Co.*, 598 F.3d 1336, 1355 (Fed. Cir. 2010). The written description must reasonably convey "to those skilled in the art that the inventor had possession of the claimed subject matter as of the filing date." *Id.* at 1351. In determining whether a specification contains an adequate written description, "one must make an 'objective inquiry into the four corners of the specification from the perspective of a person of ordinary skill in the art.'" *Boston Sci. Corp. v. Johnson & Johnson*, 647 F.3d 1353, 1366 (Fed. Cir. 2011) (citing *Ariad*, 598 F.3d at 1351). A claim will not be invalidated simply because the embodiments of the specification do not contain examples explicitly covering the full scope of the claim language. *Hynix Semiconductor Inc. v. Rambus Inc.*, Civ. A. No. 00-cv-20905 RMW, 2009 WL 230039 (N.D. Cal. Jan. 27, 2009) *aff'd,* 645 F.3d 1336 (Fed. Cir. 2011) (citing *LizardTech, Inc. v. Earth Resource Mapping, Inc.,* 424 F.3d 1336, 1345 (Fed. Cir. 2005)).

Indeed, "it is unnecessary to spell out every detail of the invention in the specification; only enough must be included to convince a person of skill in the art that the inventor possessed the invention[.]" *LizardTech,* 424 F.3d at 1345.

6. **Enablement**

97. Whether any claim of the '091 Patent, '193 Patent, '407 Patent, '148 Patent, and/or '083 Patent is invalid for failure to satisfy the enablement requirement under 35 U.S.C. § 112. *See* 35 U.S.C. § 112. Enablement is a question of law. *Amgen, Inc. v. Hoechst Marion Roussel, Inc.*, 314 F.3d 1313, 1334 (Fed. Cir. 2003); *Hybritech Inc. v. Monoclonal Antibodies, Inc.*, 802 F.2d 1367, 1384 (Fed. Cir. 1986). The patent may be enabling even though it does not expressly state some information if a person of ordinary skill in the field could make and use the invention without having to do excessive experimentation. 35 U.S.C. § 112 ¶ 1; *Hybritech*, 802 F.2d at 1384. Factors considered in determining whether excessive experimentation is required include (1) the scope of the claimed invention; (2) the amount of guidance presented in the patent; (3) the amount of experimentation necessary; (4) the time and cost of any necessary experimentation; (5) how routine any necessary experimentation is in the applicable field; (6) whether the patent discloses specific working examples of the claimed invention; (7) the nature and predictability of the field; and (8) the level of ordinary skill in the field. *In re Wands*, 858 F.2d 731, 737 (Fed. Cir. 1988).

7. **Definiteness**

98. Plaintiffs object to the submission of definiteness to the jury. Definiteness is a question of law reserved for the bench. *See Utah Med. Prods., Inc. v. Graphic Controls Corp.*, 350 F.3d 1376, 1380 (Fed. Cir. 2003) (affirming finding of infringement and validity based on jury trial on issue of infringement and a bench trial thereafter on the issue of definiteness); *Integra LifeSciences Corp. v. HyperBranch Med. Tech., Inc.*, Civ. A. No. 15-cv-00819-LPS-CJB,

2017 WL 3336274, at *15 (D. Del. July 27, 2017) ("Like claim construction, definiteness is a question of law for the court.") (*citing to H-W Tech., L.C. v. Overstock.com, Inc.*, 758 F.3d 1329, 1332 (Fed. Cir. 2014)); *Evonik Degussa GmbH v. Materia, Inc.*, Civ. A. No. 09-cv-00636, 2017 WL 3476702, at *4-*6 (D. Del. Aug. 9, 2017) (following a jury trial, district court addressing definiteness based on post-trial briefing and bench hearing).

8. **Damages**

99. Whether Plaintiffs are entitled to damages for 10X Genomics's infringement of any one or more claims of the '091 Patent, '193 Patent, '407 Patent, '148 Patent, and/or '083 Patent. *See* 35 U.S.C. § 284; *Panduit Corp. v. Stahlin Bros. Fibre Works, Inc.*, 575 F.2d 1152, 1156 (6th Cir. 1978); *Mentor Graphics Corp. v. Eve-USA, Inc.*, 851 F.3d 1275 (Fed. Cir. 2017). Whether Plaintiffs are entitled to prejudgment and post-judgment interest for 10X Genomics's infringement of any one or more claims of the '091 Patent, '193 Patent, '407 Patent, '148 Patent, and/or '083 Patent. *See* 35 U.S.C. § 284; *Gen. Motors Corp. v. Devex Corp.*, 461 U.S. 648 (1983) (pre-judgment interest); *Mathis v. Spears*, 857 F.2d 749, 760 (Fed. Cir. 1988) (post-judgment interest).

9. **Attorneys' Fees and Costs**

100. Whether Plaintiffs are entitled to attorney fees and costs. *See* Fed. R. Civ. P. 54; 35 U.S.C. § 285; 28 U.S.C. § 1920; *Octane Fitness, LLC v. ICON Health & Fitness, Inc.*, 134 S. Ct. 1749 (2014).

10. **Evidentiary Issues**

101. Analysis of prior art by non-expert or non-disclosed expert is not evidence. *See* Fed. R. Evid. 702; Fed. R. Civ. P. 26(a)(2).

102. Settlement materials are not permissible evidence pursuant to Federal Rule of Evidence 408. *See Inline Connection Corp. v. AOL Time Warner, Inc.*, 470 F. Supp.2d 435, 445

(D. Del. 2007) (granting motion *in limine* to exclude testimony or opinions on settlement offers contemplated or made by plaintiff to defendants). Given the strong public policy favoring the confidentiality of settlement materials, their use at trial would also be more prejudicial than probative. *See* Fed. R. Evid. 403.

103. No evidence of an advice of counsel defense should be permitted because none was disclosed. *See nCube Corp. v. SeaChange Int'l, Inc.*, 313 F. Supp. 2d 361, 389-90 (D. Del. 2004) (refusing to consider substantive opinions of counsel withheld as privileged and not produced prior to trial).

104. Witnesses not disclosed prior to the close of fact discovery should not be permitted to testify at trial. *See* Fed. R. Civ. P. 26(a), 26(e), 37(c).

105. Plaintiffs have submitted as Exhibit A their motions in limine that identify certain evidentiary issues that they will ask the Court to resolve prior to trial. Plaintiffs anticipate that other evidentiary issues will arise and they will present them to the Court as necessary at the appropriate time.

B. Defendant 10X Genomics

106. Pursuant to Local Rule 16.3(c)(5), 10X Genomics identifies the following issues of law that remain to be litigated, with a citation to authorities relied upon. This statement is based on the arguments 10X Genomics expects to make as well as its understanding of the arguments that Bio-Rad and Chicago are likely to make. If Bio-Rad and Chicago seek to introduce different legal arguments, 10X Genomics reserves the right to supplement this statement. This statement is based on the current status of the case and the Court's rulings to date. 10X Genomics reserves the right to modify or supplement this statement in response to subsequent rulings by the Court. If an issue identified herein is more properly considered an issue of fact, it should be so considered. If any issues of fact are more properly considered issues

of law, those issues are incorporated into this statement. The authority cited herein is not exhaustive; 10X Genomics may rely on authority not cited in this statement.

1. **Direct Infringement (35 U.S.C. § 271(a))**

107. The patent owner has the burden of proving infringement by a preponderance of the evidence. *Spectrum Pharm., Inc. v. Sandoz Inc.*, 802 F.3d 1326, 1336 (Fed. Cir. 2015); *Takeda Pharm. Co. v. Teva Pharm. USA, Inc.*, 668 F. Supp. 2d 614, 619 (D. Del. 2009); *SmithKline Diagnostics, Inc. v. Helena Labs. Corp.*, 859 F.2d 878, 889 (Fed. Cir. 1988). That burden never shifts to the defendant. *Tech. Licensing Corp. v. Videotek, Inc.*, 545 F.3d 1316, 1327 (Fed. Cir. 2008) (noting that the "burden to prove infringement" never shifts from the plaintiffs and that "the risk of decisional uncertainty stays on the proponent of the proposition").

108. A finding that even one element of an asserted claim is not met mandates a finding that the allegedly infringing product does not literally infringe that patent claim. *Cephalon, Inc. v. Watson Pharm., Inc.*, 707 F.3d 1330, 1340 (Fed. Cir. 2013); *Bayer AG v. Elan Pharm. Research Corp.*, 212 F.3d 1241, 1247 (Fed. Cir. 2000); *Glaxo, Inc. v. Novopharm, Ltd.*, 110 F.3d 1562, 1566 (Fed. Cir. 1997).

109. Determining infringement requires a two-step inquiry. Step one is to construe the disputed terms of the patent at issue; step two is to compare the accused products with the properly construed claims of the patent. *Spectrum Pharm., Inc. v. Sandoz Inc*., 802 F.3d 1326, 1337 (Fed. Cir. 2015); *Alza Corp. v. Andrx Pharm., LLC*, 607 F. Supp. 2d 614, 623 (D. Del. 2009). Step one is a question of law; step two is a question of fact. *Id*.; *see also Wavetronix v. EIS Elec. Integrated Sys.*, 573 F.3d 1343, 1354 (Fed. Cir. 2009). The ultimate issue of claim construction is a legal question, although it may involve underlying factual findings. *Teva Pharm. USA, Inc. v. Sandoz, Inc.*, 135 S. Ct. 831, 842 (2015).

110. Literal infringement occurs when each element of at least one claim of the patent is found in the alleged infringer's product. *Alza*, 607 F. Supp. 2d at 623; *DeMarini Sports, Inc. v. Worth, Inc.*, 239 F.3d 1314, 1331 (Fed. Cir. 2001). If there is any deviation or if any limitation is missing, there can be no literal infringement as a matter of law. *Cephalon, Inc.*, 707 F.3d at 1340; *DeMarini Sports*, 239 F.3d at 1331.

2. **Induced Infringement (25 U.S.C. § 271(b), (c))**

111. A "direct infringer must *actually* perform the steps in the method claim." *Ericsson, Inc. v. D-Link Sys., Inc.*, 773 F.3d 1201, 1221 (Fed. Cir. 2014). "Method claims are only infringed when the claimed process is performed, not by the sale of an apparatus that is capable of infringing use." *Ormco Corp. v. Align Tech., Inc.*, 463 F.3d 1299, 1311 (Fed.Cir.2006); *see also Travel Sentry, Inc. v. Tropp*, 497 Fed. App'x. 958, 965 (Fed.Cir.2012) (holding that a party is liable for direct infringement of a method claim only if that party exercises "control or direction" over the performance of each step of the claim, including those the party does not itself perform).

112. To establish liability for inducing infringement of a method claim, a patentee "must show direct infringement, and that the alleged infringer knowingly induced infringement and possessed specific intent to encourage another's infringement." *Toshiba Corp. v. Imation Corp.*, 681 F.3d 1358, 1363 (Fed. Cir. 2012) (internal quotation marks omitted). The requisite level of knowledge only exists "if the defendant knew of the patent" and knew as well that "the induced acts constitute patent infringement." *Commil USA, LLC v. Cisco Sys., Inc.*, 135 S. Ct. 1920, 1926 (2015) (citing *Global-Tech Appliances, Inc. v. SEB S.A.*, 563 U.S. 754, 766 (2011)). "[M]ere knowledge of possible infringement by others does not amount to inducement; specific intent and action to induce infringement must be proven." *DSU Medical Corp. v. JMS Co. Ltd.*,

471 F.3d 1293, 1305 (Fed. Cir. 2006) (citation omitted); *see also Takeda Pharm. U.S.A., Inc. v. West-Ward Pharm. Corp.*, 785 F.3d 625, 631 (Fed. Cir. 2015).

113. A reasonable non-infringement position is a defense to inducement. *Commil USA*, 135 S. Ct. at 1928. Specific intent requires not just intent to cause the acts that produce direct infringement, but "an affirmative intent to cause direct infringement" as shown by "culpable conduct[] directed to encouraging another's infringement." *Symantec Corp. v. Computer Assocs. Int'l, Inc.*, 522 F.3d 1279, 1292 (Fed. Cir. 2008) (citation omitted).

3. **Priority**

114. To establish priority of an invention, a party must show either an earlier reduction to practice or an earlier conception followed by a diligent reduction to practice. *Purdue Pharma L.P. v. Boehringer Ingelheim GMBH*, 237 F.3d 1359, 1365 (Fed. Cir. 2001). Whether a patent antedates a reference is a question of law based on subsidiary findings of fact. *In re Steed*, 802 F.3d 1311, 1316-17 (Fed. Cir. 2015).

115. "Conception is the formation, in the mind of the inventor, of a *definite and permanent idea of the complete and operative invention, as it is thereafter to be applied in practice*." *In re Steed*, 802 F.3d at 1320 (internal quotation marks omitted). To show conception, "a party must show possession of every feature recited in the count, and that every limitation of the count must have been known to the inventor at the time of the alleged conception." *Coleman v. Dines*, 754 F.2d 353, 359 (Fed. Cir. 1985). The inventor "must provide independent corroborating evidence in addition to his own statements and documents." *Martek Biosciences Corp. v. Nutrinova, Inc.*, 579 F.3d 1363, 1375 (Fed. Cir. 2009) (internal citation omitted).

116. The inventor must show diligence throughout the entire critical period, which runs from a date just before the prior art's invention date to the inventor's filing date. *See Creative Compounds, LLC v. Starmark Labs.*, 651 F.3d 1303, 1312-13 (Fed. Cir. 2011); 35 U.S.C. §

102(g) (2006). Determining whether an inventor shows reasonable diligence is a "case specific inquiry." *Monsanto Co. v. Mycogen Plant Sci., Inc.*, 261 F.3d 1356, 1369 (Fed. Cir. 2001).

117. "A patent owner need not prove the inventor *continuously* exercised reasonable diligence throughout the critical period; it must show there was *reasonably continuous* diligence." *Perfect Surgical Techniques, Inc. v. Olympus Am., Inc.*, 841 F.3d 1004, 1009 (Fed. Cir. 2016). "Under this standard, an inventor is not required to work on reducing his invention to practice every day during the critical period." *Id.* Periods of inactivity within the critical period do not automatically vanquish a patent owner's claim of reasonable diligence. *Id*. "In determining whether an invention antedates a reference, the point of the diligence analysis is not to scour the patent owner's corroborating evidence in search of intervals of time where the patent owner has failed to substantiate some sort of activity." *Id*. "It is to assure that, in light of the evidence as a whole, the invention was not abandoned or unreasonably delayed." *Id*. (internal quotation marks omitted).

118. An inventor's testimony concerning his diligence should be corroborated. *See Brown v. Barbacid*, 436 F.3d 1376, 1380 (Fed. Cir. 2006). Corroboration is determined by application of a rule of reason, for corroboration of every factual issue contested by the parties is not a requirement of law. *Id.*

4. **Anticipation**

119. "Anticipation occurs when a prior art reference discloses each element of the claimed invention." *In re AT & T Intellectual Prop. II, L.P.*, 856 F.3d 991, 996 (Fed. Cir. 2017).

120. "An anticipation inquiry involves two steps. First, the court must construe the claims of the patent in suit as a matter of law. Second, the finder of fact must compare the construed claims against the prior art to determine whether the prior art discloses the claimed

invention." *Intellectual Ventures I, LLC v. Canon Inc.*, 104 F. Supp. 3d 629, 639 (D. Del. 2015) (citations omitted).

121. The burden of proof rests on the party asserting invalidity and is one of clear and convincing evidence. *Microsoft Corp. v. i4i Ltd. P'ship*, 564 U.S. 91, 95 (2011) ("We consider whether [35 U.S.C.] § 282 requires an invalidity defense to be proved by clear and convincing evidence. We hold that it does.").

122. Anticipation of a patent requires that "a single prior art reference discloses, either expressly or inherently, each limitation of the claim." *In re Cruciferous Sprout Litig.*, 301 F.3d 1343, 1349 (Fed. Cir. 2002) (citation omitted); *see also Orion IP, LLC v. Hyundai Motor Am.*, 605 F.3d 967, 975 (Fed. Cir. 2010).

123. "A reference anticipates a claim if it discloses the claimed invention 'such that a skilled artisan could take its teachings in *combination with his own knowledge of the particular art and be in possession of the invention*.'" *See, e.g.*, *In re Graves*, 69 F.3d 1147, 1152 (Fed. Cir. 1995) (quoting *In re LeGrice*, 301 F.2d 929, 936 (C.C.P.A. 1962)). Further, additional evidence beyond a single prior art reference may be considered when it is used to explain how one skilled in the art would reasonably understand the meaning of a reference. *In re Baxter Travenol Labs.*, 952 F.2d 388, 390 (Fed. Cir. 1991); *King Pharm., Inc. v. Eon Labs., Inc.*, 616 F.3d 1267, 1276-77 (Fed. Cir. 2010); *Orion IP*, 605 F.3d at 975-77.

124. "To anticipate, the reference must also enable one of skill in the art to make and use the claimed invention." *Bristol-Myers Squibb Co. v. Ben Venue Labs., Inc.*, 246 F.3d 1368, 1374 (Fed. Cir. 2001). There is a presumption that "a prior art printed publication is enabling." *Lambda Optical Sols. LLC v. Alcatel Lucent USA Inc.*, No. CV 10-487-RGA, 2015 WL 5734427, at *1 (D. Del. Sept. 30, 2015).

5. **Obviousness**

125. "A patent may not be obtained ... if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art." 35 U.S.C. § 103(a) (2012).

126. Whether a patent claim is obvious is a question of law based on underlying factual determinations including: (1) the level of ordinary skill in the art; (2) the scope and content of the prior art; (3) the differences, if any, between the prior art and the claimed invention; and (4) secondary considerations of nonobviousness. *Graham v. John Deere Co.*, 383 U.S. 1, 17-18 (1966).

127. The Supreme Court has cautioned that, while the *Graham* factors underlie the obviousness analysis, they should not be applied rigidly. *KSR Int'l Co. v. Teleflex Inc.*, 550 U.S. 398, 415-17 (2007). The obviousness analysis must take into consideration not only the training, intelligence and creativity of a skilled artisan, but also common sense, design needs, and market pressures. *Id*. at 418-23 (explaining that "the [obviousness] analysis need not seek out precise teachings directed to the specific subject matter of the challenged claim, for a court can take account of the inferences and creative steps that a person of ordinary skill in the art would employ" and "[a] person of ordinary skill is also a person of ordinary creativity, not an automaton."); *In re Kubin*, 561 F.3d 1351, 1360 (Fed. Cir. 2009) ("This court cannot, in the face of *KSR*, cling to formalistic rules for obviousness, customize its legal tests for specific scientific fields in ways that deem entire classes of prior art teachings irrelevant, or discount the significant abilities of artisans of ordinary skill in an advanced area of art.").

128. "Obviousness does not require absolute predictability of success," but rather requires "a reasonable expectation of success." *See Medichem, S.A. v. Rolabo, S.L.*, 437 F.3d

1157, 1165 (Fed. Cir. 2006) (citation omitted); *Merck & Co., Inc. v. Biocraft Labs., Inc.*, 874 F.2d 804, 809 (Fed. Cir. 1989). Obviousness "cannot be avoided simply by a showing of some degree of unpredictability in the art so long as there was a reasonable probability of success." *Pfizer, Inc. v. Apotex, Inc.*, 480 F.3d 1348, 1364 (Fed. Cir. 2007); *see also Reckitt Benckiser Pharm. Inc. v. Watson Labs., Inc.*, No. CV 13-1674-RGA, 2016 WL 3186659, at *10 (D. Del. June 3, 2016).

6. **Secondary Considerations**

129. Once a party challenging the validity of a patent has made a prima facie case of obviousness, the burden of production shifts to the patentee to rebut that showing, typically with objective indicia, referred to as secondary considerations, of nonobviousness. *See Pfizer, Inc.*, 480 F.3d at 1360; *Novo Nordisk A/S v. Caraco Pharm. Labs.*, Ltd., 719 F.3d 1346, 1353-54 (Fed. Cir. 2013).

130. Secondary consideration may include commercial success, long felt but unsolved needs, failure of others, copying, unexpected results, industry acclaim, and skepticism of others. *See Aventis Pharm. S.A. v. Hospira, Inc.*, 743 F. Supp. 2d 305, 344 (D. Del. 2010); *Wyers v. Master Lock Co.*, 616 F.3d 1231, 1245-46 (Fed. Cir. 2010). The patentee must establish a nexus between the secondary considerations and the something that is claimed and novel in the claim. *See Wyers*, 616 F.3d at 1245-46; *Ormco Corp.*, 463 F.3d at 1311-12; *In re Kao*, 639 F.3d 1057, 1068, 1072 (Fed. Cir. 2011).

131. A showing of secondary considerations cannot overcome a strong prima facie case of obviousness. *See Wyers*, 616 F.3d at 1246; *Rothman v. Target Corp.*, 556 F.3d 1310, 1322 (Fed. Cir. 2009); *Agrizap, Inc. v. Woodstream Corp.*, 520 F.3d 1337, 1344 (Fed. Cir. 2008); *Pfizer, Inc.*, 480 F.3d at 1371-72. "While secondary considerations must be taken into account,

they do not necessarily control the obviousness determination." *Bristol-Myers Squibb Co. v. Teva Pharm. USA, Inc*., 752 F.3d 967, 977 (Fed. Cir. 2014).

7. **Enablement**

132. "Under the patent law, the specification must contain a written description of the invention that enables one of ordinary skill in the art to make and use the invention." *Premier Int'l Assocs. v. Apple Comp., Inc.*, 512 F. Supp. 2d 737, 741 (E.D. Tex. 2007). "Enablement is a question of law based on underlying factual findings." *Johns Hopkins Univ. v. 454 Life Scis. Corp.*, 183 F. Supp. 3d 563, 568 (D. Del. 2016) (quoting *MagSil Corp. v. Hitachi Glob. Storage Techs., Inc.*, 687 F.3d 1377, 1380 (Fed. Cir. 2012)).

133. The requirement of enablement is designed to ensure that the subject matter of the claimed invention is generally in the possession of the public and ready to be reproduced following the expiration of the patent period. *Spectra–Physics, Inc. v. Coherent, Inc.*, 827 F.2d 1524, 1532 (Fed. Cir. 1987).

134. To determine whether the disclosure is enabling, a two-part analysis is employed. First, the Court must delimit the scope of the claimed invention. *DeGeorge v. Bernier*, 768 F.2d 1318, 1323-24 (Fed. Cir. 1985); *Plastic Container Corp. v. Continental Plastics*, 607 F.2d 885, 896-97 (10th Cir. 1979). Second, the Court must look to the disclosures made in the patent to ascertain whether, given that level of disclosure, a person skilled in the art could successfully reproduce the claimed invention in its entire scope. *DeGeorge*, 768 F.2d at 1323-24. Under settled law, "[t]o be enabling, the specification of a patent must teach those skilled in the art how to make and use the full scope of the claimed invention without 'undue experimentation.'" *MagSil Corp. v. Hitachi Glob. Storage Techs., Inc*., 687 F.3d 1377, 1380-81 (Fed. Cir. 2012).

8. **Written Description**

135. The written description must "clearly allow persons of ordinary skill in the art to recognize that [the inventor] invented what is claimed." *Ariad Pharm., Inc. v. Eli Lilly & Co.*, 598 F.3d 1336, 1351 (Fed. Cir. 2010). "In other words, the test for sufficiency is whether the disclosure of the application relied upon reasonably conveys to those skilled in the art that the inventor had possession of the claimed subject matter as of the filing date." *Id.* (citations omitted).

136. "The level of detail required to satisfy the written description requirement depends, in large part, on the nature of the claims and the complexity of the technology." *INVISTA N. Am. S.a.r.l. v. M & G USA Corp.*, 951 F. Supp. 2d 626, 640 (D. Del. 2013) (quoting *Streck, Inc. v. Research & Diagnostic Sys., Inc.*, 665 F.3d 1269, 1285 (Fed. Cir. 2012)).

9. **Indefiniteness**

137. "[T]he ultimate question of indefiniteness is one of law. Indefiniteness, like enablement, obviousness, and claim construction, sometimes requires resolution of underlying questions of fact." *Dow Chem. Co. v. Nova Chems. Corp. (Canada)*, 809 F.3d 1223, 1224–25 (Fed. Cir. 2015).

138. "[A] patent is invalid for indefiniteness if its claims, read in light of the specification delineating the patent, and the prosecution history, fail to inform, with reasonable certainty, those skilled in the art about the scope of the invention." *Nautilus, Inc. v. Biosig Instruments, Inc.*, 134 S. Ct. 2120, 2124 (2014)

10. **Willfulness**

139. To prove willful infringement, a plaintiff must prove by a preponderance of the evidence that the defendant had knowledge of the patents in suit, but mere knowledge of the

patents are not sufficient. *See State Indus., Inc. v. A.O. Smith Corp.*, 751 F.2d 1226, 1236 (Fed. Cir. 1985); *Halo Elecs., Inc. v. Pulse Elecs., Inc.*, 136 S. Ct. 1923, 1934 (2016).

140. Instead, to prove willful infringement, the plaintiff must also prove, by a preponderance of the evidence, that the defendants' infringement was reckless, wanton, malicious, committed in bad faith, deliberate, consciously wrongful, flagrant, or—as it may be described—characteristic of a pirate. *Halo Elecs., Inc.*, 136 S. Ct. at 1932.

11. **Damages**

141. Section 284 specifies that "[u]pon finding for the claimant the court shall award the claimant damages adequate to compensate for the infringement, but in no event less than a reasonable royalty for the use made of the invention by the infringer, together with interest and costs as fixed by the court." 35 U.S.C. § 284.

142. A patent holder may not recover lost profits unless it can demonstrate that it will actually lose sales that it would have made but for the alleged infringement. *See Rite-Hite Corp.v. Kelley Co.*, 56 F.3d 1538, 1545 (Fed. Cir. 1995). One way a patent holder can demonstrate that it is entitled to recover lost profits in lieu of a reasonable royalty is to demonstrate: (1) demand for the patented product, (2) absence of non-infringing substitutes, (3) manufacturing and marketing capability to exploit the demand, and (4) the amount of profit that would have been made. *Panduit Corp. v. Stahlin Bros. Fibre Works, Inc.*, 575 F.2d 1152, 1156 (6th Cir. 1978).

143. To recover lost profits, a plaintiff must demonstrate a causal relationship between the alleged infringement and the profits it claims it lost. *Crystal Semiconductor Corp. v. TriTech Microelectronics Int'l, Inc.*, 246 F.3d 1336, 1353 (Fed. Cir. 2001). "To show 'but for' causation and entitlement to lost profits, a patentee must reconstruct the market to show, hypothetically, 'likely outcomes with infringement factored out of the economic picture. Such market

reconstruction, though hypothetical, requires 'sound economic proof of the nature of the market.'" *Id.* at 1355 (internal citation omitted).

144. "The correct inquiry under *Panduit* is whether a non-infringing alternative would be acceptable compared to the patent owner's product, not whether it is a substitute for the infringing product." *Presidio Components, Inc. v. Am. Tech. Ceramics Corp.*, 875 F.3d 1369, 1381 (Fed. Cir. 2017). A plaintiff is therefore required to reconstruct the market without the alleged infringing products to determine whether the non-infringing products would be "an acceptable, non-infringing alternative." *Id*.

145. In addition, alleged lost profits must be apportioned to reflect only the value attributable to the claims of the patents-in-suit that are found to be infringed. *See Ericsson*, 773 F.3d at 1226 ("apportionment is required even for non-royalty forms of damages").

146. A reasonable royalty is calculated by considering the factors discussed in *Georgia-Pacific Corp. v. U.S. Plywood Corp.*, 318 F. Supp. 1116, 1120 (S.D.N.Y. 1970). The reasonable royalty must be based on a hypothetical negotiation between a willing licensee and a willing licensor at the time of the alleged infringement. *See id.* at 1120-21. The *Georgia-Pacific* framework requires a "flexible" analysis of relevant factors to calculate a reasonable royalty. *See Lucent Techs., Inc. v. Gateway, Inc.*, 580 F.3d 1301, 1335 (Fed. Cir. 2009).

147. Although the jury is permitted to resolve factual questions concerning the appropriate reasonable royalty, the underlying methodology considered by the jury must be sound. *Commonwealth Sci. & Indus. Research Organisation v. Cisco Sys., Inc.*, 809 F.3d 1295, 1301-02 (Fed. Cir. 2015). The jury's opinion must be based on substantial evidence. *Lucent Techs.*, 580 F.3d at 1310, 1335.

148. An expert's opinion on damages should be excluded if it relies on "non-comparable licenses in reaching [its proposed] royalty rate." *M2M Sols. LLC v. Enfora, Inc.*, 167 F. Supp. 3d 665, 675-76 (D. Del. 2016) (quoting *DataQuill Ltd. v. High Tech Comput. Corp.*, 887 F. Supp. 2d 999, 1022 (S.D. Cal. 2011)). An opinion that is not tied to the facts of the case also should be precluded. *See ART+COM Innovationpool GmbH v. Google Inc.*, 155 F. Supp. 3d 489, 515 (D. Del. 2016).

149. Factor 11 of the Georgia-Pacific framework explicitly permits the fact-finder to consider the "extent to which the infringer has made use of the invention[] and any evidence probative of the value of that use." *Georgia-Pacific*, 318 F. Supp. at 1120. Case law makes clear that "'the value of what was taken'—the value of the use of the patented technology—measures the royalty." *Aqua Shield v. Inter Pool Cover Team*, 774 F.3d 766, 770 (Fed. Cir. 2014) (citation omitted).

150. Therefore, plaintiffs must reduce the total royalty that would be paid following the hypothetical negotiation to apportion the value attributable to the features of the patents. *Virnext, Inc. v. Cisco Sys., Inc.*, 767 F.3d 1308, 1326 (Fed. Cir. 2014). The entire market value rule "prohibits the presentation of evidence to a jury that uses the entire market value" of a product that includes both patented and unpatented features. *Sonos, Inc. v. D&M Holdings Inc.*, No. CV 14-1330-WCB, 2017 WL 4969328, at *8 (D. Del. Nov. 1, 2017) (Bryson, J.); *see also Ericsson*, 773 F.3d at 1226 (same). Regardless of the difficulty of assigning value to a patented feature, the patent holder must attempt to do so by reducing the royalty base in calculating damages. *Ericssson*, 773 F.3d at 1226; *Virnext*, 767 F.3d at 1326-28.

151. A patent holder is not entitled to an automatic award of prejudgment interest. *Gen. Motors Corp. v. Devex Corp.*, 461 U.S. 648, 656 (1983). A trial court has discretion to deny

or limit prejudgment interest in appropriate cases. *Id*. at 656-57. The court also exercises discretion to determine the rate of prejudgment interest and whether it should be compounded. *Bio-Rad Labs., Inc. v. Nicolet Instrument Corp.*, 807 F.2d 964, 969 (Fed. Cir. 1986).

12. **Injunctive Relief**

152. 10X Genomics does not believe that there is any evidence that would support a request by Bio-Rad for injunctive relief, but because Bio-Rad and Chicago have included injunctive relief as a legal issue, 10X Genomics sets out the legal principles below.

153. "According to well-established principles of equity, a plaintiff seeking a permanent injunction must satisfy a four-factor test before a court may grant such relief. A plaintiff must demonstrate: (1) that it has suffered an irreparable injury; (2) that remedies available at law, such as monetary damages, are inadequate to compensate for that injury; (3) that, considering the balance of hardships between the plaintiff and defendant, a remedy in equity is warranted; and (4) that the public interest would not be disserved by a permanent injunction." *eBay Inc. v. MercExchange, L.L.C.*, 547 U.S. 388, 391 (2006). "A finding of irreparable harm requires a causal nexus between the patent infringement and the alleged injury." *EMC Corp. v. Zerto, Inc.*, No. CV 12-956(GMS), 2016 WL 1291757, at *13 (D. Del. Mar. 31, 2016), aff'd, 691 F. App'x 623 (Fed. Cir. 2017).

154. "An injunction should not be granted lightly, as the Supreme Court has cautioned, because it is a 'drastic and extraordinary remedy.' Indeed, if the plaintiff's injury can be adequately redressed with a less severe remedy, 'recourse to the additional and extraordinary relief of an injunction' is not warranted." *Riverbed Tech., Inc. v. Silver Peak Sys., Inc.*, No. CV 11-484-RGA, 2014 WL 4695765, at *3 (D. Del. Sept. 12, 2014) (quoting Monsanto Co. v. Geertson Seed Farms, 561 U.S. 139, 165 (2010)).

155. "[M]oney damages are rarely inadequate for a patentholder that is willing to forego its exclusive right for some manner of compensation." *XpertUniverse, Inc. v. Cisco Sys.*, *Inc.*, No. CV 09-157-RGA, 2013 WL 6118447, at *13 (D. Del. Nov. 20, 2013), *aff'd*, 597 F. App'x 630 (Fed. Cir. 2015).

156. To justify an injunction, a plaintiff must, among other things, establish a "causal nexus" between a decline in market share and that there are no available third-party non-infringing substitutes. *See Apple Inc. v. Samsung Elecs. Co.*, 809 F.3d 633, 639 (Fed. Cir. 2015); *Advanced Cardiovascular Sys., Inc. v. Medtronic Vascular, Inc.*, 579 F. Supp. 2d 554, 559 (D. Del. 2008) (finding no irreparable harm, and denying permanent injunction, when there was "no indication that [infringer] is currently drawing . . . sales away from [plaintiff], as compared to [a third party]," in a multi-party market); *IGT v. Bally Gaming Int'l Inc.*, 675 F. Supp. 2d 487, 489 (D. Del. 2009) (plaintiff failed to prove irreparable harm when "[o]n the record before the court, it does not appear that plaintiff and defendants are the only market participants," when motion for injunctive relief was brought "against a landscape of several competitors and several competitive products"); *LG Elecs. U.S.A., Inc. v. Whirlpool Corp.*, 798 F. Supp. 2d 541, 563 (D. Del. 2011) (finding no irreparable harm, and denying permanent injunction, in case where the parties competed in a "multi-competitor" market and sales lost by the patentee "may be due to customers' desire for other features" or sales lost to competitors other than the infringer, and when patentee did not identify "specific customers it has lost, or stands to lose" directly as a result of the infringement). It is necessary for a plaintiff to show such a nexus because "[w]here irreparable injury is based on lost sales, 'a likelihood of irreparable harm cannot be shown if sales would be lost regardless of the infringing conduct.'" *Presidio Components, Inc. v. Am. Tech. Ceramics Corp.*, 875 F.3d 1369, 1383 (Fed. Cir. 2017).

157. A court cannot remedy a plaintiff's status as a late entrant in the market with an injunction. *See LG Elecs. U.S.A.,* 798 F. Supp. 2d at 563 (holding that allegation that infringer "shaped the market" by entering first cut *against* an award of injunctive relief, because injunctive relief in patent infringement cases is prospective, not retrospective, and the court could not change who had entered the market first by issuing an injunction); *see also XpertUniverse,* 2013 WL 6118447, at *12 (finding no irreparable harm, and denying injunctive relief, after finding that the patentee "would not benefit substantially from an injunction being issued at this stage, several years *after*" the infringer allegedly irreparably harmed the patentee by "cornering" a market (emphasis added)); *Koninklijke Philips Elecs. N.V. v. Seoul Semiconductor Co., Ltd.*, No. SACV110356AGRNBX, 2011 WL 13228032, at *12 (C.D. Cal. Nov. 14, 2011) (rejecting "first mover advantage" argument "because Philips and Seoul are not the only firms in the AC LED market. In reality, numerous firms compete in this market including Samsung, Cree, Epistar, Everlight, and Link Labs").

13. **Exceptional Case**

158. If 10X Genomics prevails, there is an issue as to whether it is entitled to attorney's fees.

159. 35 U.S.C. § 285 specifies that "[t]he court in exceptional cases may award reasonable attorney fees to the prevailing party."

160. A case may be found to be "exceptional" under section 285 for (1) lack of substantive strength of litigating position, (2) unreasonable conduct, or (3) subjective bad faith. *Octane Fitness, LLC v. ICON Health & Fitness, Inc.*, 134 S. Ct. 1749, 1756–57 (2014); *Bayer CropScience AG v. Dow AgroSciences LLC*, 851 F.3d 1302, 1305-06 (Fed. Cir. 2017). For example, an award of attorney's fees was appropriate where plaintiffs "(1) acted in bad faith in filing a baseless infringement action and continuing to pursue it despite no evidence of

infringement; and (2) engaged in vexatious and unjustified litigation conduct that unnecessarily prolonged the proceedings and forced [the defendant] to incur substantial expenses." *MarcTec, LLC v. Johnson & Johnson*, 664 F.3d 907, 915-16 (Fed. Cir. 2012).

14. **Evidentiary Issues**

161. 10X Genomics has submitted as Exhibit B its motions in limine that identify certain evidentiary issues that 10X Genomics will ask the Court to resolve prior to trial. 10X Genomics anticipates that other evidentiary issues will arise and will present them to the Court as necessary at the appropriate time.

VI. EXHIBITS TO BE OFFERED AT TRIAL

A. Plaintiffs Bio-Rad and Chicago

162. Plaintiffs Bio-Rad and Chicago's exhibit list is submitted as Exhibit C. Plaintiffs further reserve the right to offer at trial any exhibit 10X Genomics lists on its exhibit list.

B. Defendant 10X Genomics

163. Defendant 10X Genomics's exhibit list is submitted as Exhibit D. 10X Genomics further reserves the right to offer at trial any exhibit Plaintiffs list on their exhibit list.

VII. WITNESSES TO BE CALLED AT TRIAL

A. Plaintiffs Bio-Rad and Chicago

164. Plaintiffs identify the following list of witnesses in good faith they expect to call at trial. Plaintiffs reserve the right to modify this list. Plaintiffs further incorporate by reference and reserve the right to call all witnesses 10X Genomics lists on its witness list. Plaintiffs also reserve the right to call witnesses to authenticate documents and rebuttal witnesses or impeachment witnesses as may be necessary upon reasonable notice. Plaintiffs are not required to present testimony from any witness on their list of witnesses. Plaintiffs further object to any

attempt by 10X Genomics to introduce QuantaLife, Inc. advice of counsel at trial through its witnesses. *See* Ex. A [Plaintiffs' Motion in Limine No. 3]

WITNESS	**LIVE OR BY DEPOSITION**
WILL CALL LIST	
Gerdts, Cory	Live
Ginsburg, Eric	Live
Ismagilov, Rustem	Live
Malackowski, James	Live
Sia, Samuel	Live
Tumolo, Annette	Live
MAY CALL LIST	
Jeremey Agresti	Live
Rajiv Bhardadwaj	Live and/or by deposition
H-C. Chang	Live
Mark DiPanfilo	Live
Ben Hindson	Live
Christopher Hindson	Live and/or by deposition
Wilhelm Huck	Live
Darren Link	Live
Adam Lowe	Live and/or by deposition
Kevin Ness	Live
Jeffrey Olson	Live
Jamie Osborn	Live and/or by deposition
Viresh Patel	Live
Andrew Price	Live and/or by deposition
John Quackenbush	Live
Spencer Roach	Live
Serge Saxonov	Live and/or by deposition
Neal Shea	Live and/or by deposition
Joshua Shinoff	Live
Helen Baca	Live
John Stuelpnagel	Live
Joshua Tice	Live
Paul Wyatt	Live and/or by deposition

165. For those witnesses Plaintiffs intend to offer by deposition, Plaintiffs submit their deposition designations as Exhibit E.

B. Defendant 10X Genomics

166. 10X Genomics identifies the following list of witnesses in good faith it expects to call at trial. 10X reserves the right to modify this list. 10X Genomics further incorporates by reference and reserves the right to call all witnesses Plaintiffs list on their witness list. 10X Genomics also reserves the right to call witnesses to authenticate documents and rebuttal witnesses or impeachment witnesses as may be necessary upon reasonable notice. 10X Genomics is not required to present testimony from any witness on their list of witnesses.

WITNESS	**LIVE OR BY DEPOSITION**
WILL CALL LIST	
Chang, Hseuh-Chia	Live
Godici, Nicholas[4]	Live
Hindson, Ben	Live
Huck, Wilhelm	Live
Ness, Kevin	Live
Quackenbush, John	Live
Stuelpnagel, John	Live
Sullivan, Ryan	Live
MAY CALL LIST[5]	
Gerdts, Cory	Live
Ginsburg, Eric	Live
Ismagilov, Rustem	Live
Malackowski, James	Live
Sia, Samuel	Live

[4] 10X Genomics understands that the Court has previously indicated that it would preclude Mr. Godici's testimony. Assuming the Court rules at it has previously indicated, 10X Genomics has listed Mr. Godici to preserve its rights in any appeal.

[5] The inclusion of a witness on the may-call list is not a representation that 10X Genomics will be making that witness available at trial.

Tumolo, Annette	Live
Agresti, Jeremey	Live and/or by deposition
Baca, Helen	Live and/or by deposition
Bhardadwaj, Rajiv	Live
Brown, Keith	Live and/or by deposition
Cunningham, Robert	Live and/or by deposition
DiPanfilo, Mark	Live and/or by deposition
Hindson, Christopher	Live
Link, Darren	Live and/or by deposition
Lowe, Adam	Live
Olson, Jeffrey	Live and/or by deposition
Osborn, Jamie	Live and/or by deposition
Patel, Viresh	Live and/or by deposition
Price, Andrew	Live
Roach, Spencer	Live and/or by deposition
Saxonov, Serge	Live
Shea, Neal	Live
Shinoff, Joshua	Live and/or by deposition
Tice, Joshua	Live and/or by deposition
Wyatt, Paul	Live

167. For those witnesses 10X Genomics intend to offer by deposition, 10X Genomics submits their deposition designations as Exhibit F.

VIII. PLAINTIFFS BIO-RAD AND CHICAGO'S STATEMENT OF INTENDED PROOF

168. Plaintiffs respectfully submit their statement of intended proof as to what they expect to prove in support of their claims, including for their claims for relief. Plaintiffs' statement is limited to their expected proof with regard to their claims, and does not address the proof that they may choose to present in response to the defenses and counterclaims for which 10X Genomics has the burden of proof and may present at trial. Plaintiffs' statement is based on the current disposition and status of the case and the Court's current rulings. Plaintiffs reserve the right to revise this statement in light of further decisions or orders of the Court, including without limitation any rulings on pending motions.

169. During trial in this matter, Plaintiffs intend to establish that 10X Genomics's GemCode™, GemCode™ Single Cell, Chromium™ Controller, Chromium™ Controller Single Cell, GemCode™ Long-Read, GemCode™ Single Cell, Chromium™ Genome/Exome, Chromium™ Single Cell 3', and Chromium™ Single Cell V(D)J products infringe one or more asserted claims of the '091 Patent, '193 Patent, '407 Patent, '148 Patent, and/or '083 Patent. Plaintiffs intend to establish that they are entitled to lost profits and/or reasonable royalties from 10X Genomics for its unauthorized use of the '091 Patent, '193 Patent, '407 Patent, '148 Patent, and/or '083 Patent in an amount to be determined. Plaintiffs further intend to establish that 10X Genomics willfully infringed one or more claims of the '091 Patent, '193 Patent, '407 Patent, '148 Patent, and/or '083 Patent.

IX. DEFENDANT 10X GENOMICS'S STATEMENT OF INTENDED PROOF

170. 10X Genomics respectfully submits its statement of intended proof as to what it expects to prove in support of its claims, including for its claims for relief. 10X Genomics's statement is based on the current disposition and status of the case and the Court's current rulings. 10X Genomics reserves the right to revise this statement in light of further decisions or orders of the Court, including without limitation any rulings on pending motions.

A. Non-Infringement

171. 10X Genomics intends to rebut Plaintiffs' allegations that 10X Genomics's GemCode™, GemCode™ Single Cell, Chromium™ Controller, Chromium™ Controller Single Cell, GemCode™ Long-Read, GemCode™ Single Cell, Chromium™ Genome/Exome, Chromium™ Single Cell 3', and Chromium™ Single Cell V(D)J products or the use thereof infringe one or more asserted claims of the '091 Patent, '193 Patent, '407 Patent, '148 Patent, and/or '083 Patent.

B. Invalidity

1. **Priority**

172. 10X Genomics intends to rebut Plaintiffs' allegations regarding the priority dates of the asserted claims of the '091 Patent, '193 Patent, '407 Patent, '148 Patent, and/or '083 Patent.

2. **35 U.S.C. § 102**

173. 10X Genomics intends to prove by clear and convincing evidence that claims 1, 3, 10, and 11 of the '407 Patent are anticipated by *Quake*.

3. **35 U.S.C. § 103**

174. 10X Genomics intends to prove by clear and convincing evidence that claims 1, 3, 10, and 11 of the '407 Patent are obvious based on one or more of the following combinations and the general knowledge of a skilled artisan:

- *Quake* in view of *Corbett*
- *Quake* in view of *Corbett* and *Schubert*
- *Quake* in view of *Lagally*
- *Quake* in view of *Lagally* and *Schubert*
- *Quake* in view of *Corbett* and *Krafft*
- *Shaw Stewart* in view of *Corbett*
- *Shaw Stewart* in view of *Corbett* and *Schubert*
- *Shaw Stewart* in view of *Lagally*
- *Shaw Stewart* in view of *Lagally* and *Schubert*

175. 10X Genomics intends to prove by clear and convincing evidence that claims 1, 6, and 8 of the '193 Patent are obvious based on one or more of the following combinations and the general knowledge of a skilled artisan:

- *Quake* in view of *Corbett*
- *Quake* in view of *Corbett* and *Schubert*
- *Quake* in view of *Lagally*
- *Quake* in view of *Lagally* and *Schubert*
- *Quake* in view of *Corbett* and *Krafft*
- *Shaw Stewart* in view of *Corbett*
- *Shaw Stewart* in view of *Corbett* and *Schubert*
- *Shaw Stewart* in view of *Lagally*
- *Shaw Stewart* in view of *Lagally* and *Schubert*

176. 10X Genomics intends to prove by clear and convincing evidence that claims 1, 6, and 8 of the '148 Patent are obvious based on one or more of the following combinations and the general knowledge of a skilled artisan:

- *Quake* in view of *Corbett*
- *Quake* in view of *Corbett* and *Schubert*
- *Quake* in view of *Lagally*
- *Quake* in view of *Lagally* and *Schubert*
- *Quake* in view of *Anderson*
- *Quake* in view of *Anderson* and *Schubert*
- *Shaw Stewart* in view of *Corbett*
- *Shaw Stewart* in view of *Corbett* and *Schubert*

- *Shaw Stewart* in view of *Lagally* and *Schubert*

177. 10X Genomics intends to prove by clear and convincing evidence that claims 1, 3, 5, 31, 37, 38, 39 of the '091 Patent are obvious based on one or more of the following combinations and the general knowledge of a skilled artisan:

- *Quake* in view of *Erbacher*
- *Quake* in view of *Corbett* and *Erbacher*
- *Quake* in view of *Schubert* and *Erbacher*
- *Quake* in view of *Lagally* and *Erbacher*
- *Quake* in view of *Krafft* and *Erbacher*
- *Shaw Stewart* in view of *Corbett* and *Erbacher*
- *Shaw Stewart* in view of *Schubert* and *Erbacher*
- *Shaw Stewart* in view of *Lagally* and *Erbacher*
- *Shaw Stewart* in view of *Krafft* and *Erbacher*

178. 10X Genomics intends to prove by clear and convincing evidence that claims 1, 2, 9, 10, 20, 22, and 26 of the '083 Patent are obvious based on one or more of the following combinations and the general knowledge of a skilled artisan:

- *Quake* in view of *Schubert*
- *Quake* in view of *Krafft*
- *Quake* in view of *Corbett* and *Schubert*
- *Quake* in view of *Corbett* and *Krafft*
- *Quake* in view of *Lagally* and *Schubert*
- *Shaw Stewart* in view of *Schubert*
- *Shaw Stewart* in view of *Krafft*

- *Shaw Stewart* in view of *Corbett* and *Schubert*
- *Shaw Stewart* in view of *Corbett* and *Krafft*

4. **35 U.S.C. § 112**

179. 10X Genomics intends to prove by clear and convincing evidence that claims 1, 3, 10, and 11 of the '407 Patent are invalid under § 112 for lack of written description, lack of enablement, and/or indefiniteness.

180. 10X Genomics intends to prove by clear and convincing evidence that claims 1, 6, and 8 of the '193 Patent are invalid under § 112 for lack of written description, lack of enablement, and/or indefiniteness.

181. 10X Genomics intends to prove by clear and convincing evidence that claims 1, 6, and 8 of the '148 Patent are invalid under § 112 for lack of written description, lack of enablement, and/or indefiniteness.

182. 10X Genomics intends to prove by clear and convincing evidence that claims 1, 3, 5, 31, 37, 38, 39 of the '091 Patent are invalid under § 112 for lack of written description and/or lack of enablement.

183. 10X Genomics intends to prove by clear and convincing evidence that claims 1, 2, 9, 10, 20, 22, and 26 of the '083 Patent are invalid under § 112 for lack of written description, lack of enablement, and/or indefiniteness.

C. Damages

184. Plaintiffs have the burden of proving by a preponderance of the evidence that they are entitled to damages should the Asserted Patents be found valid and infringed. If 10X Genomics were to be found liable for infringing all the Asserted Patents, 10X Genomics will introduce evidence that Plaintiffs are not entitled to lost profits and are entitled to reasonable royalties of no more than $111,332 for instruments and $207,353 for kits and chips, for a total of

$318,685. Maximum royalties would be less if it is found (1) that 10X Genomics's products sold outside of the United States did not infringe any of the Asserted Patents, (2) that only the '193 and '148 Patents are found to be valid and infringed, or (3) that, as a consequence of the design change of 10X Genomics's GEM-U chip, single-cell related revenues occurring after May 3, 2017 would not be included in the royalty base.

D. Other Relief

185. 10X Genomics intends to rebut Plaintiffs' allegations that they are entitled to damages, declaratory relief, and injunctive relief.

186. 10X Genomics will seek an order adjudging and decreeing that Plaintiffs be denied all relief requested under their Third Amended Complaint; declaring that Plaintiffs have not and will not infringe, directly or indirectly, any claim of the '091 Patent, the '407 Patent, the '148 Patent, the'193 Patent, or the '083 Patent, and declaring that the patents are invalid.

187. 10X Genomics will seek an order granting 10X Genomics judgment in its favor on Plaintiffs' Third Amended Complaint, denying Plaintiffs' request for injunctive relief, and dismissing Plaintiffs' Third Amended Complaint with prejudice.

188. 10X Genomics will seek a determination that this is an exceptional case under 35 U.S.C. § 285, and that 10X Genomics is entitled to an award of attorneys' fees and costs.

189. 10X Genomics will seek an order awarding any other such relief as is just and proper.

X. AMENDMENTS OF THE PLEADINGS

190. The Parties do not propose any amendments to the current pleadings.

191. This Court's rulings and decisions on pending motions may significantly resolve or affect the issues otherwise to be tried in this case. The Parties therefore reserve their respective rights to amend, or seek amendment of, the pleadings, so that they conform with and

are consistent with the Court's decisions and rules on the summary judgment motion and the evidence presented at trial.

XI. CERTIFICATION OF GOOD-FAITH SETTLEMENT EFFORTS

192. The Parties hereby certify that they have engaged in a good faith effort to explore resolution of the controversy by settlement, including by mediation. The Parties, through their respective counsel, have considered the possibility of settlement. It was determined that the matter could not be resolved at this juncture by settlement.

XII. OTHER MATTERS

A. Length of Trial

193. The case is currently scheduled for a five-day jury trial to begin on Monday, April 16, 2018 at 9:30 a.m., with subsequent trial days beginning at 9:30 a.m. and the jury excused each day at 5:00 p.m. The trial will be timed, as the Court will allocate to counsel a number of hours in which to present their respective cases, including time for opening statements and closing arguments, but not including time for *voir dire*.

B. Jury Instructions

194. The Parties' joint [proposed] preliminary jury instructions shall be filed separately with the Court.

195. The Parties' joint [proposed] final jury instructions shall be filed separately with the Court.

C. Verdict Form

1. Plaintiffs Bio-Rad and Chicago

196. Plaintiffs Bio-Rad and Chicago's [proposed] verdict form shall be filed separately with the Court.

2. Defendant 10X Genomics

197. Defendant 10X Genomics's [proposed] verdict form shall be filed separately with the Court.

D. Voir Dire

1. Plaintiffs Bio-Rad and Chicago

198. Plaintiffs Bio-Rad and Chicago's [proposed] *voir dire* shall be filed separately with the Court.

2. Defendant 10X Genomics

199. Defendant 10X Genomics's [proposed] *voir dire* shall be filed separately with the Court.

E. Motions in Limine

1. Plaintiffs Bio-Rad and Chicago

200. Plaintiffs Bio-Rad and Chicago's motions *in limine*, along with defendant 10X Genomics's respective responses, and Bio-Rad and Chicago's replies, are submitted as Exhibit A.

2. Defendant 10X Genomics

201. Defendant 10X Genomics's motions *in limine*, along with plaintiffs Bio-Rad and Chicago's respective responses, and 10X Genomics's replies, are submitted as Exhibit B.

F. Set Up Of Electronic Equipment

202. The Parties request that the Court grant them access to the Courtroom on Friday, April 13, 2018, the business day before trial begins, to allow them to set up electronic and computer devices to be used during the trial.

G. Jury Procedures

203. The Parties agree that the current version of the Federal Judicial Center Introduction to the Patent System video (2013 revision) will not be played as part of the Court's preliminary jury instructions.

204. On the first day of trial, each member of the jury shall be provided a binder containing the Asserted Patents, a list of the claim terms of the Asserted Patents that have been construed and their constructions, a list of acronyms likely to be used during trial with definitions on which the Parties agree, and several blank sheets for notes. 10X Genomics believes that the binder also should include prior art references, including but not limited to Quake.

205. The Parties agree that the jurors be permitted to write notes by hand in their provided binder during the trial, and that jurors be permitted to bring their provided binders into the deliberation room. The Parties further propose that the jurors be instructed not to exchange or share their binders with each other (though they may discuss the contents of their binders) and that the jurors' binders be collected by the Clerk each evening after daily recess, and collected and destroyed without review after the jury's discharge.

H. Stipulation Regarding Exchanges During Trial

206. The Parties stipulate to propose the following procedures to aid trial in the present action:

1. Exchange of Exhibits and Demonstratives to be Used with Witnesses During Trial

207. By 5:00 p.m.[6] the evening before a witness is put on the stand, the party offering the witness will identify exhibits that the party intends to use for examination. By 6:00 p.m. the party offering the witness will provide color copies of illustratives to be used with the witness in

[6] All times set forth herein are reflected in Eastern Standard Time.

PDF form. For any video or animations to be used, the party seeking to use the illustrative will provide such illustratives in an electronic form that enables the receiving party to play the video or animation as it is intended to be used in court. For any physical exhibits to be used, the party seeking to use the exhibit must make it available for inspection. The parties need not identify exhibits or illustratives for use in cross examination.

208. By 8:00 p.m. the evening before a witness is put on the stand, the opposing party will identify any objections to the exhibits and the illustratives.

209. The Parties shall meet and confer on any objections by 9:00 p.m. that evening.

210. Any unresolved issues will be presented to the Court the morning of the proposed use of the disputed exhibits and/or illustratives.

211. The notice provisions in this section do not apply to illustrative exhibits created in the courtroom, or to the enlargement, highlighting, ballooning, or excerpting of trial exhibits or testimony by attorneys or by the witness.

2. Identification of Order of Witnesses as Trial Processes

212. Each party will identify all live trial witnesses in the order that the party expects to call at least two full calendar days before the witness will be called (*e.g.*, notice must be given by 8:30 a.m. on Monday for witnesses to be called on Wednesday).

213. A party shall provide reasonable notice if for any reason it does not intend to call a witness that it had previously indicated would appear live as a "will call" witness. In that event, the other party may designate and offer deposition testimony from such witness (subject to the Federal Rules of Evidence). Counter-designations, and counter-counter designations may also be provided. In the event that such designations cannot be completed by the times agreed to below, the parties shall work in good faith to set deadlines for the disclosure of such designations, counterdesignations, counter-counter designations, and objections.

3. Presentation of Deposition Designations

214. All counter-designations and counter-counter designations will be played/read together with the original designations in the order that the witness provided the testimony.

215. The party offering the witness will prepare the video clips/transcript to be played/read presenting all portions of the designated testimony in sequence. To that end, the following procedure will apply.

216. By 12:00 p.m. two calendar days before a witness is put on the stand by deposition, the party offering the witness will identify those portions of the transcript that will be presented to the jury.

217. By 7:00 p.m. two calendar days before the witness is put on the stand by deposition, the responsive party will identify any objections and counter-designate portions of the transcript that will be presented to the jury and identify any objections to the testimony.

218. By 9:00 p.m. two calendar days before the witness is put on the stand by deposition, the party offering the witness will identify any counter-counter-designations and objections to the counter designations.

219. The Parties shall meet and confer on any objections by 10:00 p.m. two calendar days before the witness is put on the stand by deposition, and will present any unresolved issues to the Court that morning. The Parties shall submit highlighted copies of the disputed materials (with each side's designated testimony highlighted in a different color) and an itemized list of the remaining objections.

220. By 5:00 p.m. the evening before the witness is put on the stand by deposition, the party offering the witness will provide a copy of the video or transcript containing both Parties' designations, consistent with any objections resolved by the Court. All irrelevant and redundant

material, including colloquy between counsel, objections, and pauses will be eliminated when the deposition is read or played at trial.

4. Notice of Intention to Rest

221. By 8:00 a.m. two calendar days before a party intends to rest its case, the resting party shall give the other party notice of its intention to rest.

5. Outside Attorneys' Eyes Only Information

222. Either party may request that particular exhibits marked "OUTSIDE ATTORNEYS' EYES ONLY INFORMATION" under the Protective Order entered in this case be displayed on monitors visible to the Court, the jury, and the parties, but not otherwise be displayed in the courtroom during trial and not be filed publicly. Such requests should be made the morning before the exhibit will be used.

XIII. ORDER TO CONTROL COURSE OF ACTION

223. This order shall control the subsequent course of the action, unless modified by the Court to prevent manifest injustice.

224. The Parties reserve the right to seek leave to supplement or amend this final pretrial order based on subsequent events or by agreement.

Date: March 27, 2018

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Date: March 27, 2018

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